## \_ABSTRACT

rDNA corresponding to an endosymbiotic bacteria associated with *Ecteinascidia turbinata* has been identified. The bacterium appears to be responsible for the biosynthesis of ecteinascidin compounds. The 16S rDNA sequence corresponding to *Candidatus* Endoecteinascidia frumentensis SEQ ID NO: 1 has been deposited in GeneBank with the accession number AY054370.